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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/667,301	09/25/2000	Hideo Watanabe	Q60969	1597

7590 09/20/2002

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EXAMINER
HUNTER, ALVIN A

ART UNIT	PAPER NUMBER
3711	

DATE MAILED: 09/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/667,301	WATANABE ET AL.	
	Examiner	Art Unit	
	Alvin A. Hunter	3711	

-- The MAILING DATE of this c mmunication appears on th cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 June 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 4-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi et al. (USPN 5830085) in view of Shama (USPN 4848770).

Higuchi et al. discloses the same subject matter except having a mantle layer having a Shore D hardness of 15 to 30, the core's surface hardness up to 85 JIS-C, and the mantle layer having a JIS-C hardness of up to 85. Higuchi et al. discloses the surface hardness of the core being less than 85 JIS-C, the hardness of less than 85 JIS-C, and the surface hardness of the core being higher than the center hardness of the core by 5 to 25. However, since the hardness ratios are approximately 1, it is submitted that the compression ratio is also about 1, i.e. approximately 0.98. Higuchi et al. also notes that the restitution would be affected if the intermediate layer exceeds 10 or more than that of the surface hardness of the core (See Figure 1 and Column 4, lines 35 through 43). Also shown in Table 4, CE 2 and 7 show that a intermediate layer having a smaller hardness than the core's surface can result in good feel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct a golf ball having an intermediate layer of any desired hardness, such as Shore D 15 to 40, for the purpose of routine optimization for obtaining the restitution

desired for the golf ball. It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have a mantle layer less than the hardness of the core's surface in order to give the golf ball good feel. Shama discloses a three piece golf ball having a center and mantle which contributes to the coefficient of restitution that results in a golf ball having excellent resilience (See Column 5, lines 59 through 67; and Column 8, lines 15 through 17). As shown in Table 5 and 6, the mantle layer has a preferred compression of 70 to 82 and the core has a preferred compression of 55 to 78 (See Column 5). Having the above core and mantle compression results in a higher velocity when being struck with a club. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a compression ratio of the mantle and the core of of any value, particularly at least 0.98, as taught by Shama, for the purpose of routine optimization for obtaining the resilience desired for the present invention. Shama has been used to replace the OFFICIAL NOTICE, therefore, the rejection remains the same.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 4, 5, 11, 12, and 16 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 09776663. Although the conflicting claims are not identical, they are not patentably distinct from each other because Application No. 09/776663 discloses an intermediate layer having a specific gravity of 1.2 or less. One having ordinary skill would know that adjusting the specific gravity influences the moment of interia and spin of a golf ball; therefore, it would have been obvious to adjust the specific gravity of any layer to any amount in order to obtain the desired moment of inertia and spin for a golf ball.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments with respect to claims 1 and 4-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is 703-306-5693. The examiner can normally be reached on Monday trough Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Sewell, can be reached on (703) 308-2126. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Paul T. Sewell
Supervisory Patent Examiner
Group 3700